

Serial No. 09/667,460
2154

- 18 -

Art Unit:

REMARKS

This Amendment is responsive to the Office Action dated March 23, 2004. All rejections and objections of the Examiner are respectfully traversed. Reconsideration and further examination is respectfully requested.

At paragraphs 1-3 of the Office Action, the Examiner rejected claims 1-12, 14-30, 32-36, 38, 40 and 42-44 for obviousness under 35 U.S.C. 103, citing the combination of United States patent number 6,581,108 of Denison et al. ("Denison et al.") and United States patent number 5,493,607 of Arumainayagam et al. ("Arumainayagam et al."). Applicants respectfully traverse this rejection.

Denison et al. disclose a network system that receives incoming packets from multiple private networks with potentially conflicting Internet Protocol (IP) address spaces, and that performs header and payload address translation operations to ensure that the IP address spaces of the incoming packets are made non-conflicting, such that the packets can be managed using a single network management platform. A router in the Denison et al. system receives the packets and performs Network Address Translation (NAT) on IP header information. Packets identified by the Denison et al. system as being associated with a particular protocol, e.g., a Simple Network Management Protocol (SNMP), are redirected by the router to a Management Payload Address Translator (MPAT) that applies a fast parsing process to the packet payloads to identify IP address-related information therein, and if necessary applies an appropriate translation of the identified information before routing the packets to a network management platform. The fast

Serial No. 09/667,460
2154

- 19 -

Art Unit:

parsing process provided by the Denison et al. system is an efficient object-based process which avoids the need to parse the entire packet payload.

Denison et al. specifically teach that the MPAT is designed to locate and translate IP addresses that are contained in the payload of SNMP packets, and scans all relevant data in a given redirected SNMP packet received from the router, parses the ASN.1 encoding used by SNMP, and detects data that is an IP address. The Denison et al. MPAT replaces the detected part of the SNMP packet by a translated address if necessary, and may support translations that are Management Information Base (MIB) document based and encoded in a non-standard way.

The router of Denison et al. scans all incoming packets. If a given packet originated in a translated customer network, then the header information is translated by the Denison et al. system using conventional NAT. If a given incoming packet translated by the Denison et al. router is determined to be an SNMP packet, it is redirected by the router to the MPAT for payload address translation in accordance with the invention.

Arumainayagam et al. disclose a technique for multi-system network addressing in which storage locations, such as voice mailboxes are addressed on a plurality of widely distributed host systems, connect via a network, by defining logical domains, which may include storage locations on more than one host system. The domains of Arumainayagam et al. are defined by address tables which indicate which host systems provide ranges of address locations. Transfer of data between the Arumainayagam et al. domains is simplified by the use of translation tables. One type of translation table in Arumainayagam et al. is an alias table which has entries containing a range in the originating domain, a new domain and a starting point for a range in the new domain, thus defining a one-to-one correspondence between the ranges in the two domains. Another

Serial No. 09/667,460
2154

- 20 -

Art Unit:

translation table in Arumainayagam et al. is a gateway table which defines a gateway to a new domain when an input address has characteristics matching a prefix, number of digits, or both, of an entry in the gateway table. Upon finding the closest possible match in the gateway table, the portion of the input address after the prefix, if any, is used the Arumainayagam et al. as the address in the new domain.

A range of address locations having a scope, or number of locations, of at least one, is defined by the first two columns of the Arumainayagam et al. address table. The third column contains a host identifier of the host system providing physical storage for the storage locations or voice mailboxes within the range. Arumainayagam et al. further allow that alternative ways of defining the address table include using a starting point of a range and length of the range and other known methods of identifying storage locations provided by a host system.

The alias table of Arumainayagam et al. maps addresses *in one domain to addresses in another domain with a one-to-one correspondence*. The address codes defining the beginning and end of the range are used Arumainayagam et al. to translate an input address into a storage location in another domain. The primary use of aliases in Arumainayagam et al. is to define groups of voice mailboxes associated with CENTREX lines. If a voice mailbox or other application account is outside an originating domain having three digit mailboxes, a three digit number may be used to in the Arumainayagam et al. system to identify another domain in an alias table.

Nowhere in the combination of Denison et al. and Arumainayagam et al. is there disclosed or suggested any management information base for configuring a domain-specific source address filter, the management information base including:

Serial No. 09/667,460
2154

- 21 -

Art Unit:

at least one management object defining a number of addresses for detecting packets requiring domain-specific network address translation;
a management object defining a domain for said number of addresses; and
wherein the management information base is operable to map a given local source address to a different one of a plurality of global addresses for each corresponding one of a plurality of destination address domains. (emphasis added)

as in the present independent claim 1. Independent claims 8, 14, 21, 26, 32, 38, 40, 42 and 44 include analogous features. In contrast, the system of Denison et al. includes no hint or suggestion of even the desirability of providing different global addresses for translation of any kind of local address, depending on a destination address domain. Similarly, Arumainayagam et al. expressly states that the alias table maps addresses *in one domain to addresses in another domain with a one-to-one correspondence*. Accordingly, neither Denison et al. nor Arumainayagam et al. include any hint or suggestion of even the desirability of having a system that provides domain specific mapping of local source addresses to global addresses, as in the present independent claims 1, 8, 14, 21, 26, 32, 38, 40, 42 and 44.

For the above reasons, Applicants respectfully urge that the combination of Denison et al. and Arumainayagam et al. fails to disclose or suggest all the features of the present independent claims 1, 8, 14, 21, 26, 32, 38, 40, 42 and 44. Accordingly, Applicants submit that the combination of Denison et al. and Arumainayagam et al. does not support a *prima facie* case of obviousness under 35 U.S.C. 103 with regard to independent claims 1, 8, 14, 21, 26, 32, 38, 40, 42 and 44. As to dependent claims 2-7, 9-12, 15-20, 22-25, 27-30, 33-36, and 43, they each depend from independent claims 1, 8, 14, 21, 26, 32, 38, 40, 42, and are respectfully believed to

Serial No. 09/667,460
2154

- 22 -

Art Unit:

be patentable over the combination of Denison et al. and Arumainayagam et al. for at least the same reasons. Reconsideration of claims 1-12, 14-30, 32-36, 38, 40 and 42-44 is respectfully requested.


The Examiner indicated that claims 31, 37, 39, 41, 43 and 45 included allowable subject matter. These claims have accordingly been re-written in independent form.

In view of the above amendments and arguments, the claims are believed to be allowable. Accordingly, Applicants respectfully request that the Examiner's rejections be withdrawn. For these reasons, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone David A. Dagg, Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

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Docket No. 120-146